ABSTRACT OF THE DISCLOSURE

A lead frame (2a) has a die bonding pad portion (3) and an inner lead portion (4). A power element (1) is mounted on the die bonding pad portion (3) of the lead frame (2a) and is bonded to the die bonding pad portion (3) with solder (9). The power element (1) has electrodes connected through an aluminum wire (8) to the inner lead portion (4) of another lead frame (2b). A metal block (5) has a surface formed with a protrusion bonded to the lead frame (2a) in opposed relation to the power element (1). A resin package (6) has an insulation layer (7) formed on the opposite surface of the metal block (5) from the lead frame (2a), and seals the power element (1), the lead frames (2a, 2b) and the metal block (5). An external heat dissipator (11) is mounted on a surface of the insulation layer (7) opposite from the metal block (5). A semiconductor device and a method of manufacturing the same improve a heat dissipation characteristic and maintain a dielectric breakdown voltage.